Evaluating treatment for obesity

by Richard T. Lindsey, Ph.D.

With the incidence rates of adult obesity resting between 15 percent and 50 percent (Bray, 1976) and with 25 percent of American youth being obese, an important challenge presents itself for practitioners of health care. In sheer numbers these statistics represent approximately 34 million people (Van Itallie, 1985). Not only do the obese bear the brunt of social ridicule and discrimination, they also face significant health risks due to their weight. As weight increases, so do the risks for significant medical conditions, including hypertension, diabetes, cancer, gallbladder and cardiovascular diseases. If they issue. In addition, obese individuals will have hospital stays one-third longer than non-obese individuals for a cost one-third higher.

If this were not sobering enough, research indicates that as many as 90 percent of those who successfully lose weight will regain all their lost weight within five years or less (e.g., International Obesity Newsletter, 1989; University of California, Berkeley, 1989).

Given these realities, important questions emerge. What intervention strategies ought to be considered for the obese individual desiring to lose weight? How might such a determination be made? What critical factors ought to be evaluated in making a selection of a program? What factors militate against being successful? This article will focus on these issues and will provide some basic guidelines to assist in matching a person with an appropriate level of treatment.

Basic elements

In sorting through the plethora of plans, some basic elements are critical. If claims sound too good to be true, they probably are. The more balanced the weight-loss plan and the more it incorporates sound nutrition with exercise and movement, the more likely it is to be successful.

The most difficult challenge is coping with the "instant cure" mentality that promises extraordinary results with little effort. The obese individuals need to remember and be reminded that they did not become obese in a day and they won't lose their desired weight in a day either.

After outlining some basic elements central to any effective program and highlighting some important caveats, I will outline some criteria to assist in the determination of the appropriate level of intervention or treatment for a given individual. To anticipate what will follow, interventions need to be seen on a continuum from least to most intensive and intrusive. As is true in all mental health work, appropriate treatment flows from accurate, comprehensive assessment. When the problem is well-understood and conceptualized, the appropriate intervention regimen readily follows.

Intervention principles

The following criteria should be kept in mind when evaluating any weight-loss approach. The more restrictive and limiting the diet, the greater the psychological, nutritional and metabolic risk.

Psychologically, when people are deprived, either of a reasonable quantity or a type of food that they enjoy, it frequently creates a deprivation state that puts them at risk for relapse. As a result, people, by sheer willpower, may be able to abstain from the forbidden food for a time, but eventually they succumb to temptation and violate their abstinence (abstinence violation effect). Generally, they feel guilty, perhaps make a resolve to try again or just give up because they wrongly conclude that they have no willpower, when the problem may be the plan.

Nutritionally, any diet that overly relies on one food or one particular food group or is dramatically low in calories is risky for creating health-related problems and/or subsequent weight gains. Diet plans should incorporate an appropriate balance of the four major food groups, ideally under the supervision of a registered dietician.

In evaluating any approach, an essential ingredient to keep in mind is determining the plan's potential to adversely compromise the individual's basal metabolic rate (BMR).

In general, two-thirds of the energy consumed in food each day is accounted for by the BMR. In short, the BMR is the amount of energy the body requires per day to maintain its various vital functions (if we were to lie on the couch all day and do nothing). Calorically, the BMR is about 10 times a person's current weight. So, for a 180-pound person, the BMR accounts for 1,800 calories per day. Any activity the person engages in will require additional energy. Logically, in order to lose weight the individual must make a shift in the energy equation, expend more calories than are consumed.

People who decide to lower their caloric intake to 1500 calories and discover that they begin to lose weight may say, "Since I can lose two pounds per week on 1500 calories, then I could lose twice as much on 750 calories per day." That is where the logic ends. The body is extremely sensitive to any perceptions of potential starvation. In the evolutionary cycle, the body has developed mechanisms to help sustain itself during times of "famine." Fat cells play a key role in the process, but they are not the only player. If people dramatically reduce their caloric intake, frequently to less than 1200 calories per day, in short order the body reacts to the perceived "famine" and lowers its basal metabolic rate, by as much as 25 percent within two weeks.

As the body learns to live on less, the weight loss subsides or, if people reach their goal and return to eating at a level that in the past would have maintained their weight, they suddenly discover that they are regaining what they just lost. They are using moderation — moderation in dietary change, exercise and weight loss (1-2 pounds per week).

In order to lose weight people must moderately reduce the number of calories they take in and they must increase moderately the amount of their exercise. A program that does not actively promote exercise is best not done.

Fat, which is the target, requires oxygen to be metabolized. Exercise increases the availability of oxygen for this purpose. In addition, it appears that it is easier for the body to break down lean body tissue (muscle) than it is for it to metabolize body fat. If muscle is not being exercised, the body will break it down rather than metabolize the fat for the energy it needs. This places dieters at risk to regain, because it requires more energy to maintain muscle than it does to maintain fat.

Any program that does not promote drinking at least eight glasses of water per day, does not and suspiciously. The body needs a certain water volume to maintain its regulatory and cleansing processes. If a person's water volume is not adequate, the kidneys are not able to function optimally in removing waste products from the bloodstream. As this occurs, some of the kidney's purifying functions will be taken over by the liver, which keeps the liver from its primary job of metabolizing fat. In the same way as the body reacts to dramatic decreases in food availability, it does the same if water intake is inadequate. It learns to store water, which leads to temporary, but very discouraging, weight gains for people actively trying to lose.

Step model

With the above caveats in mind, how might an appropriate weight-loss approach be chosen? Forex (1989) recommends a "Stepped Care Model" involving varying levels of intensity of intervention. Generally, each successive step is more intensive and ought to be explored when the previous step has not...
dysfunctional family system is very common for this subset of the population as well, and these issues actively interfere with treatment compliance and must be addressed in therapy. The primary ingredients for programs in this category include the use of an array of cognitive and behavioral strategies. These should include elements such as self-monitoring of food intake, stimulus control, portion control, problem-solving, exercise, nutrition, identification and refutation of dysfunctional beliefs about food, their bodies, etc. Accessibility to nutritional counseling is an essential element in this process so that clients are provided with the sound nutritional information that they need and to help challenge erroneous beliefs they may hold about food.

As was mentioned earlier, any attempts at weight loss must incorporate movement and exercise. Obese clients, as a function of their weight, are highly susceptible to injury when they begin to increase their exercise and movement. Having these individuals involved in working with a movement specialist who appreciates their sensitivities about their bodies and the inherent difficulties they experience in exercising cannot be understated.

An additional, most critical element that must be woven throughout a program is relapse prevention. Individuals need to be taught and prepared to deal with the high-risk situations that inevitably cause them to lose their resolve and in their sense of self-efficacy, which undermines their compliance (cf. Marlatt & Gordon, 1985).

Finally, it is important to make referrals to various medical specialists when it is indicated. A significant portion of this population is also clinically depressed and can benefit significantly from anti-depressant medication. Thyroid abnormalities play a role in somewhat less than 5 percent of those with weight-related problems, but it is important to be attentive to that possibility in clients and medication to help regulate thyroid function can be very helpful as well.

Step Four: Very Low Calorie Diet Programs (VLCDs)

Very Low Calorie Diet Programs (VLCDs) have become very popular in the past couple of years and are highly successful in helping people lose their desired weight in a relatively short amount of time. Some of these programs are well-designed and medically well-supervised. They are generally designed for people who have at least 50 pounds to lose.

Unfortunately, relapse rates within five years rest at better than 90 percent (e.g., International Obesity Newsletter, 1989; University of California, Berkeley, 1989). In addition, as the caloric intake is very low, frequently 500-800 calories per day, they are likely to compromise a person’s metabolism in the process. Exercise can help in offsetting some of this. It appears that people have only one trial on such a program in their lifetime, as subsequent attempts to lose using a VLCD are disappointing. Also, compliance is more difficult with each successive attempt.

However, these programs can be of significant benefit to a subset of the population that has not been successful with the above three steps (despite being in compliance with them) and/or faces imminent medical risks that necessitate losing the weight as quickly as possible. Conditions such as crippling arthritis, uncontrolled hypertension, diabetes or any disease that necessitates immediate weight loss ought to consider a VLCD. Many of these programs have well-developed psychoeducational and support elements as well.

Step Five: Intensive Individual Programs

Intensive individual programs ought to be considered when the obesity is significant and has either not responded to the above treatments or is so severe that a specialized program is necessary. In cases such as these, consideration ought to be given to intensive residential treatments or obesity surgery. Obesity represents a major social and health-related issue for contemporary America. It demands focused, responsible attention for the young and the old. It necessitates a treatment continuum based on sound nutritional, exercise and psychophysiological principles.

As weight-loss regimes will continue to appear at a rapid rate, having overarching principles against which to evaluate each approach is critical, as this article has attempted to show. Focused attention by health care providers can help address a serious and potentially life-threatening condition afflicting millions of Americans.

References


